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# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name WATERBORNE AMINE EPOXY PASTEL BASE V440-85

V44085

Alternate Product Code

Product Class

Color

Recommended use

Restrictions on use

WATERBORNE EPOXY

ΑII

Industrial paint

No information available

Manufacturer Emergency Telephone

Benjamin Moore & Co. CHEMTREC (US): 800-424-9300

101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com CHEMTREC (outside US): (703)-527-3887

# 2. HAZARDS IDENTIFICATION

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

## Label elements

## Danger

### Hazard statements

Harmful if swallowed Causes skin irritation Causes serious eye damage

May cause cancer

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Suspected of damaging fertility or the unborn child

Causes damage to organs

Causes damage to organs through prolonged or repeated exposure



Appearance liquid Odor little or no odor

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

# **Precautionary Statements - Response**

IF exposed: Call a POISON CENTER or doctor/physician

### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

Immediately call a POISON CENTER or doctor/physician

### Skin

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

## Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

# **Precautionary Statements - Storage**

Store locked up

# **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# Hazards not otherwise classified (HNOC)

Not applicable

### Other information

No information available

# Other hazards

**IMPORTANT:** Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

CAUTION: All floor coatings may become slippery when wet. Where non-skid characteristics are desired, a small

amount of clean sand may be added. Stir often during application.

# 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Titanium dioxide	13463-67-7	30
Aliphatic polyamine	-	20
Silica, crystalline	14808-60-7	15
2-Propoxyethanol	2807-30-9	5
2-Butoxyethanol	111-76-2	5
Silica, amorphous	7631-86-9	5
Dipropylene glycol monomethyl ether	34590-94-8	5
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	0.5

# 4. FIRST AID MEASURES

General Advice Immediately call a POISON CENTER or doctor/physician.

**Eye Contact** Immediate medical attention is required. Immediately flush with plenty of water.

After initial flushing, remove any contact lenses and continue flushing for at least

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15 minutes. Keep eye wide open while rinsing.

**Skin Contact** Immediate medical attention is required. Wash off immediately with soap and

plenty of water while removing all contaminated clothes and shoes. Wash clothing

before reuse.

**Inhalation** Call a physician or Poison Control Center immediately. Move to fresh air. If not

breathing, give artificial respiration.

**Ingestion** Never give anything by mouth to an unconscious person. Immediate medical

attention is required. Drink 1 or 2 glasses of water. Do not induce vomiting without

medical advice.

**Protection Of First-Aiders** Use personal protective equipment.

Most Important Symptoms/Effects None known.

Notes To Physician Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

**Protective Equipment And Precautions For** 

**Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear.

Specific Hazards Arising From The Chemical Closed containers may rupture if exposed to fire or

extreme heat.

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Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge No

Flash Point Data

Flash Point (°F)

Flash Point (°C)

Method

Not applicable

Not applicable

Flammability Limits In Air

Lower flammability limit:Not applicableUpper flammability limit:Not applicable

NFPA Health: 1 Flammability: 0 Instability: 0 Special: Not Applicable

## NFPA Legend

0 - Not Hazardous

- 1 Slightly
- 2 Moderate
- 3 High
- 4 Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Other Information** Prevent further leakage or spillage if safe to do so.

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods for Cleaning Up Soak up with inert absorbent material. Sweep up and shovel into suitable

containers for disposal.

# 7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or

sanding dust. In case of insufficient ventilation, wear suitable respiratory

equipment.

Storage Keep container tightly closed. Keep out of the reach of children.

Incompatible Materials No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL

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Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Silica, crystalline	0.025 mg/m <sup>3</sup> - TWA	-
2-Butoxyethanol	20 ppm - TWA	50 ppm - TWA 240 mg/m³ - TWA prevent or reduce skin absorption
Silica, amorphous	N/E	20 mppcf - TWA
Dipropylene glycol monomethyl ether	100 ppm - TWA 150 ppm - STEL Skin	100 ppm - TWA 600 mg/m³ - TWA prevent or reduce skin absorption

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment** 

**Eye/Face Protection** Safety glasses with side-shields.

**Skin Protection** Protective gloves and impervious clothing.

**Respiratory Protection** In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures Avoid contact with skin, eyes and clothing. Remove and wash contaminated

clothing before re-use. Wash thoroughly after handling.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

**Odor** little or no odor

Odor Threshold No information available

 Density (lbs/gal)
 11.9 - 12.0

 Specific Gravity
 1.42 - 1.44

pHNo information availableViscosity (cps)No information availableSolubility(ies)No information available

Water solubility

Evaporation Rate

Vapor pressure @20 °C (kPa)

No information available
No information available
No information available

Vapor density

No information available

 Wt. % Solids
 55 - 65

 Vol. % Solids
 35 - 45

 Wt. % Volatiles
 35 - 65

 Vol. % Volatiles
 55 - 65

 VOC Regulatory Limit (g/L)
 <250</td>

 Boiling Point (°F)
 212

 Boiling Point (°C)
 100

Boiling Point (°F)

Preezing Point (°C)

Streezing Point (°C)

Preezing Point (°C)

Streezing Point (°C)

Boiling Point (°C)

Streezing Point (°C)

Streezing Point (°C)

Flash Point (°F)

Flash Point (°C)

Method

Flammability (solid, gas)

Not applicable

Not applicable

Not applicable

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Upper flammability limit:Not applicableLower flammability limit:Not applicable

Autoignition Temperature (°F)No information availableAutoignition Temperature (°C)No information availableDecomposition Temperature (°F)No information availableDecomposition Temperature (°C)No information availablePartition coefficientNo information available

# 10. STABILITY AND REACTIVITY

Reactivity Not Applicable

Chemical Stability Stable under normal conditions.

Conditions to avoid Prevent from freezing.

**Incompatible Materials**No materials to be especially mentioned.

Hazardous Decomposition Products

None under normal use.

Possibility of hazardous reactions

None under normal conditions of use.

# 11. TOXICOLOGICAL INFORMATION

### **Product Information**

Information on likely routes of exposure

**Principal Routes of Exposure** Eye contact, skin contact and inhalation.

**Acute Toxicity** 

Product Information No information available

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Eye contact** Causes eye irritation. Risk of serious damage to eyes. May cause burns. Severely

irritating to eyes.

**Skin contact** Irritating to skin. Prolonged skin contact may cause skin irritation and/or dermatitis.

May cause burns.

**Inhalation** Harmful by inhalation. Causes respiratory tract irritation. Vapours may be irritating

to eyes, nose, throat, and lungs. May cause additional affects as listed under

"Ingestion".

**Ingestion** Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea. Can burn mouth, throat, and stomach.

SensitizationNo information availableNeurological EffectsNo information availableMutagenic EffectsNo information available

**Reproductive Effects** Possible risk of impaired fertility. Possible risk of harm to the unborn child.

**Developmental Effects** No information available. **Target organ effects** No information available.

STOT - single exposure May cause disorder and damage to the. Respiratory system. Digestive System. STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure if inhaled.

Causes damage to organs through prolonged or repeated exposure if swallowed.

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kidney.

No information available. Other adverse effects No information available **Aspiration Hazard** 

## Numerical measures of toxicity

## The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1468 mg/kg 14003 mg/kg ATEmix (dermal) ATEmix (inhalation-dust/mist) 8.5 mg/L ATEmix (inhalation-vapor) 424 mg/L

# **Component Information**

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

2-Propoxyethanol

LD50 Oral: 3089-3090 mg/kg (Rat) LD50 Dermal: 960 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 9060 mg/m<sup>3</sup> (Rat)

2-Butoxyethanol

LD50 Oral: 470 mg/kg (Rat) LD50 Dermal: 220 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 450 ppm (Rat, 4 hr.)

Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 2 mg/L Dipropylene glycol monomethyl ether

LD50 Oral: 5400 µL/kg (Rat) LD50 Dermal: 10 mL/kg (Rabbit)

Distillates (petroleum), solvent-refined light paraffinic

LD50 Oral: > 15 g/kg (Rat)LD50 Dermal: > 5 g/kg (Rabbit)

### Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	1 - Human Carcinogen	Known Human	Listed
Silica, crystalline		Carcinogen	

· Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

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• Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

# Legend

IARC - International Agency for Research on Cancer NTP - National Toxicity Program OSHA - Occupational Safety & Health Administration

## 12. ECOLOGICAL INFORMATION

# **Ecotoxicity Effects**

The environmental impact of this product has not been fully investigated.

# **Product Information**

## **Acute Toxicity to Fish**

No information available

### **Acute Toxicity to Aquatic Invertebrates**

No information available

# **Acute Toxicity to Aquatic Plants**

No information available

# Persistence / Degradability

No information available.

## **Bioaccumulation**

No information available.

### **Mobility in Environmental Media**

No information available.

### **Ozone**

No information available

## **Component Information**

## **Acute Toxicity to Fish**

Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

2-Butoxyethanol

LC50: 1490 mg/L (Bluegill sunfish - 96 hr.)

### **Acute Toxicity to Aquatic Invertebrates**

No information available

## **Acute Toxicity to Aquatic Plants**

No information available

# 13. DISPOSAL CONSIDERATIONS

## **Waste Disposal Method**

Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

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# 14. TRANSPORT INFORMATION

**DOT** Not regulated

ICAO / IATA Not regulated

IMDG / IMO Not regulated

# 15. REGULATORY INFORMATION

# **International Inventories**

**TSCA: United States**Yes - All components are listed or exempt.
Yes - All components are listed or exempt.

# Federal Regulations

## SARA 311/312 hazardous categorization

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS No.	Weight-%	CERCLA/SARA 313
			(de minimis concentration)
2-Propoxyethanol	2807-30-9	5	1.0
2-Butoxyethanol	111-76-2	5	1.0
Dipropylene glycol monomethyl ether	34590-94-8	5	1.0

## Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

None

# **US State Regulations**

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## **California Proposition 65**

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► WARNING: Cancer and Reproductive Harm— www.P65warnings.ca.gov

### State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Titanium dioxide	X	X	X
Silica, crystalline	X	X	X
2-Propoxyethanol		X	X
2-Butoxyethanol	X	X	X
Silica, amorphous	X	X	X
Dipropylene glycol monomethyl ether	X	X	X

## Legend

X - Listed

# 16. OTHER INFORMATION

HMIS - Health: 1\* Flammability: 0 Reactivity: 0 PPE: -

## **HMIS Legend**

- 0 Minimal Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- \* Chronic Hazard
- X Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By Product Stewardship Department

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645

800-225-5554

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Revision Summary

Not available

### Disclaimer

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**END OF SAFETY DATA SHEET**